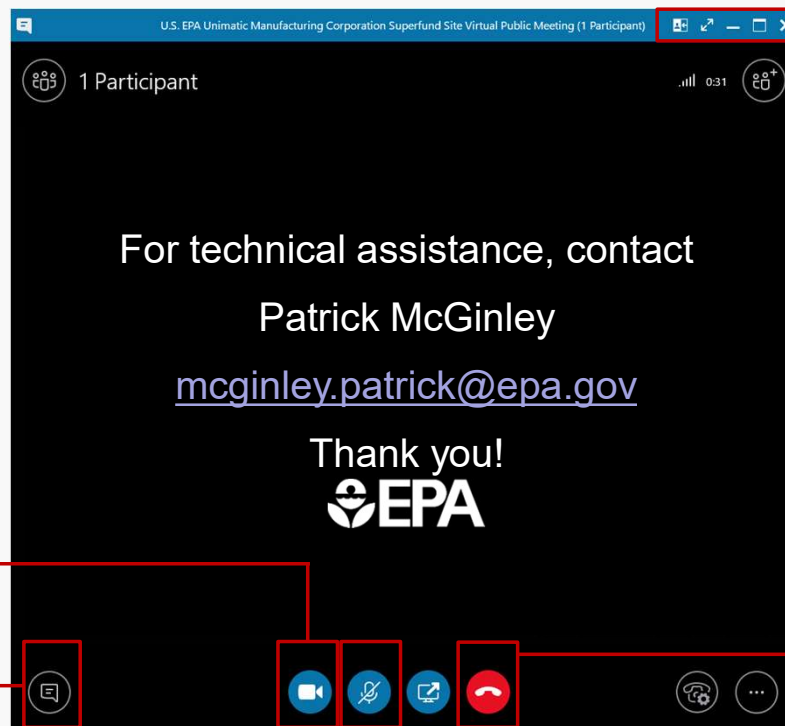




## Skype Meeting Controls



to enlarge skype meeting

to change the layout between speaker view and content view

to turn on and off your video

to ask question and share comments

*please provide your name and affiliation before questions/comments; Ex: Jane Doe, resident, Where is the Riverside site located?*

to leave the call

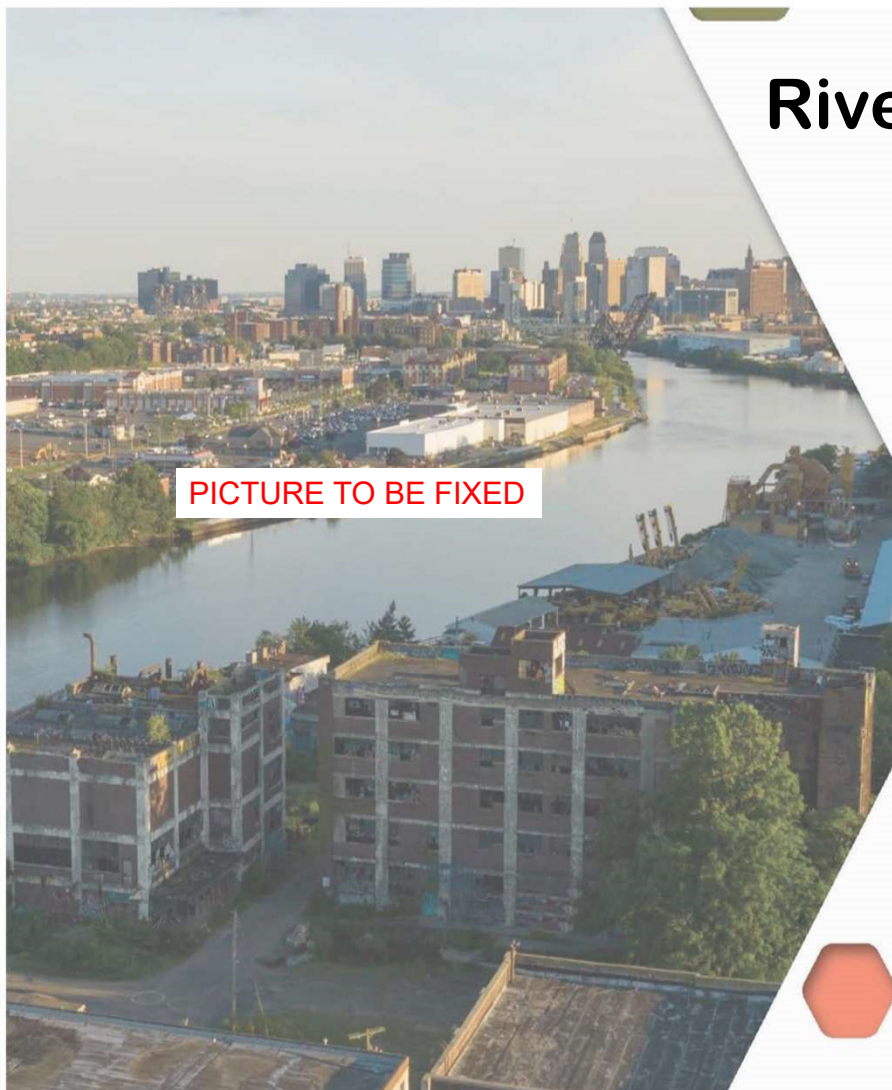
to mute and unmute your mic



# Riverside Industrial Park Superfund Site

## Proposed Plan Virtual Public Meeting

**Wednesday, August 5, 2020  
7:00 PM to 9:00 PM**





# Agenda

**Introductions . . . . .Shereen Kandil**

Presentation. . . . . Josh Smeraldi

Questions and Comments . . . . . EPA Team

Closing Comments . . . . .Shereen Kandil



## Who's Who at EPA

### Josh Smeraldi

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### Shereen Kandil

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Phone: 212-637-4333

Email: [kandil.shereen@epa.gov](mailto:kandil.shereen@epa.gov)

*EPA relies on public input to ensure that the concerns of the community are considered in selecting an effective remedy for the Superfund site. EPA encourages the public to review the Proposed Plan and submit comments.*



# Meet Our Team

- **Michael Sivak, EPA Branch Chief**
  - **Kathryn Flynn, EPA Hydrogeologist**
  - **Marian Olsen, EPA Human Health Risk Assessor**
  - **Chuck Nace, EPA Ecological Risk Assessor**
  - **Will Reilly, EPA Site Attorney**
- 
- **Jeff Fredrick - WSP, EPA Contractor**
  - **Len Warner - WSP, EPA Contractor**
  - **AmyMarie Accardi-Dey - WSP, EPA Contractor**
  - **Ann Rychlenski - WSP, EPA Contractor**



# Agenda

Introductions . . . . . Shereen Kandil

**Presentation. . . . . Josh Smeraldi**

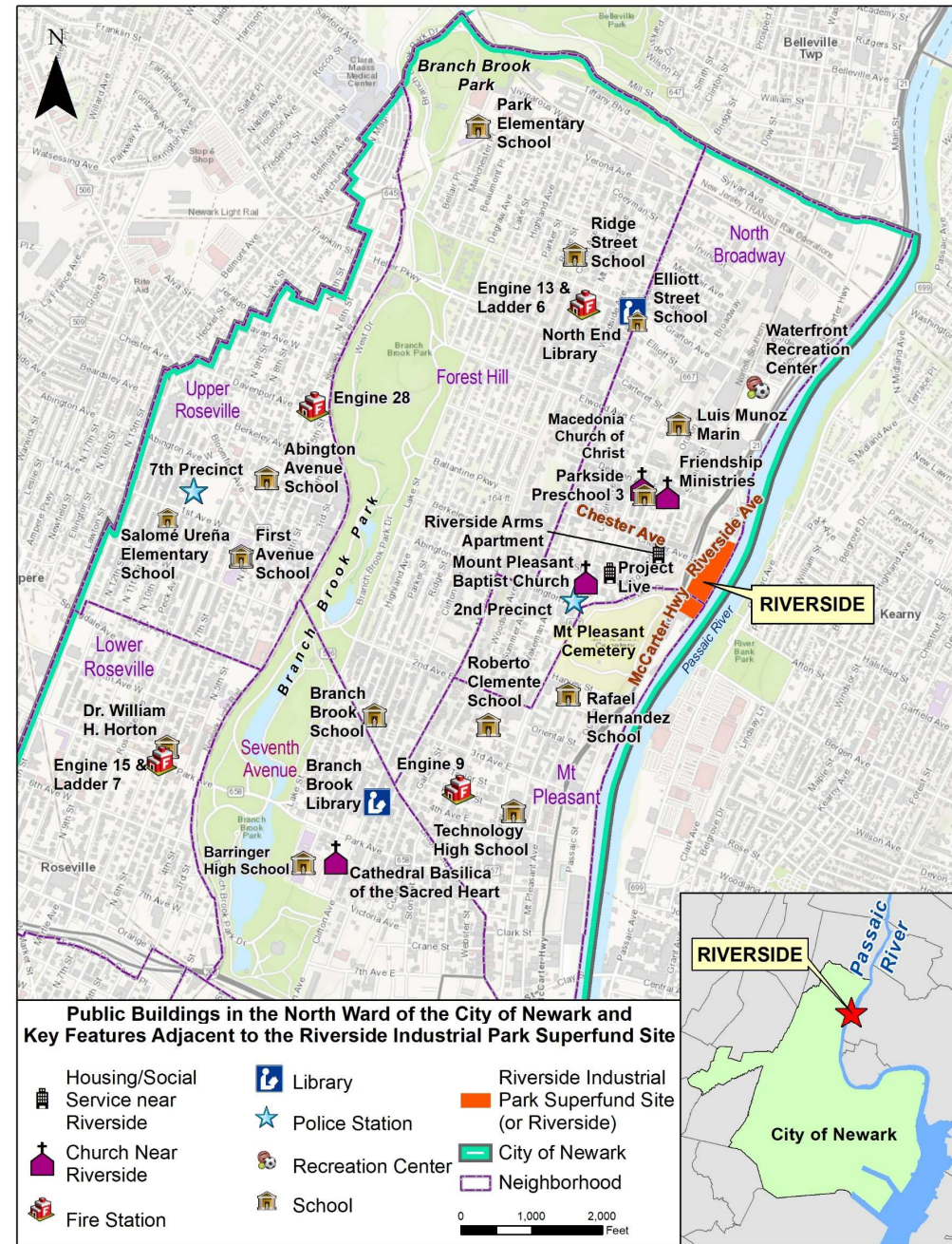
Questions and Comments . . . . . EPA Team

Closing Comments . . . . . Shereen Kandil



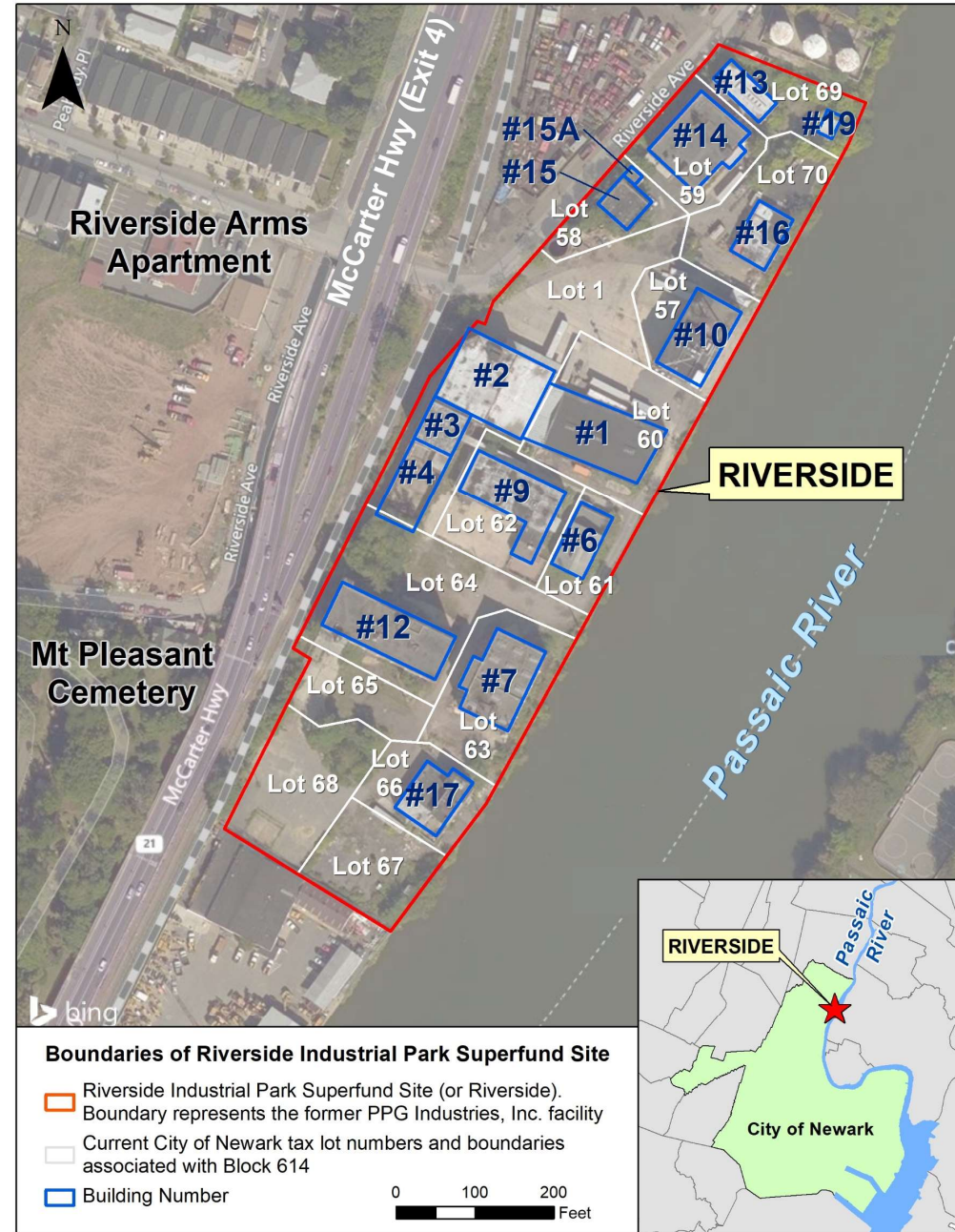
# Location of Riverside Industrial Park in Your Community

- ❑ Located in City of Newark, North Ward, off Chester Avenue
- ❑ Bordered by the Passaic River on the east and Riverside Avenue and McCarter Highway (Exit 4) on the west
- ❑ Near the Mount Pleasant Cemetery



# Map of Riverside Industrial Park

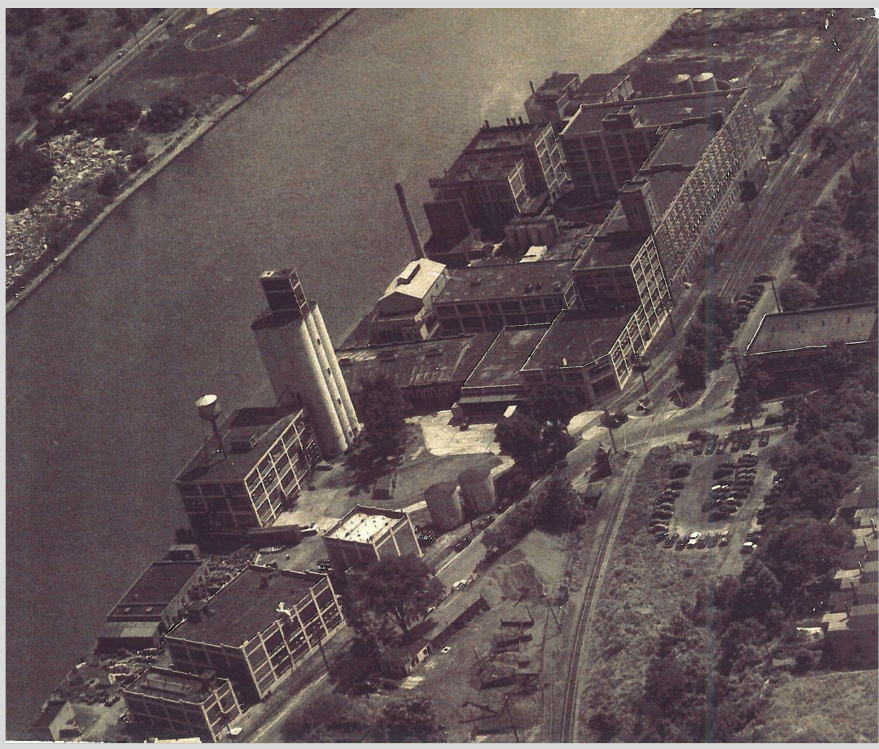
- ☐ Blue lines outline the buildings; white lines outline the tax lots
- ☐ Site is a 7.6-acre industrial/commercial complex
- ☐ North side consists of active businesses; south side is mostly vacant
- ☐ Anticipated future use of property is to remain industrial







## Timeline of Riverside Industrial Park



*Patton Paint Company, circa 1955*

- ❑ 1903 Patton Paint Company constructed its plant at the Site and began operations
  - The plant used metals as pigment including lead-based raw materials
- ❑ 1920 Patton Paint Company merged with Pittsburgh Plate and Glass Company, which has been known as PPG Industries Inc. (PPG) since 1968
- ❑ 1971 PPG ceased operations at the Site



## **Following PPG, Various Companies Operated at Site from 1971 to 2020 – Some Continue to Operate**

**Frey Industries, Inc. / Jobar  
Baron Blakeslee, Inc.  
Universal International Industries  
Samax Enterprises  
HABA International, Inc. / Davion  
Inc.  
Roloc Film Processing  
Gilbert Tire Corporation**

**Chemical Compounds, Inc. / Celcor  
Associates, LLC  
Teluca  
Gloss Tex Industries, Inc.  
Ardmore, Inc.  
Monaco RR Construction Company  
Federal Refining Company  
Midwest Construction Company**

Listed on EPA's National Priority List in 2013. In 2014, EPA reached agreement with PPG to conduct study.

Soil samples

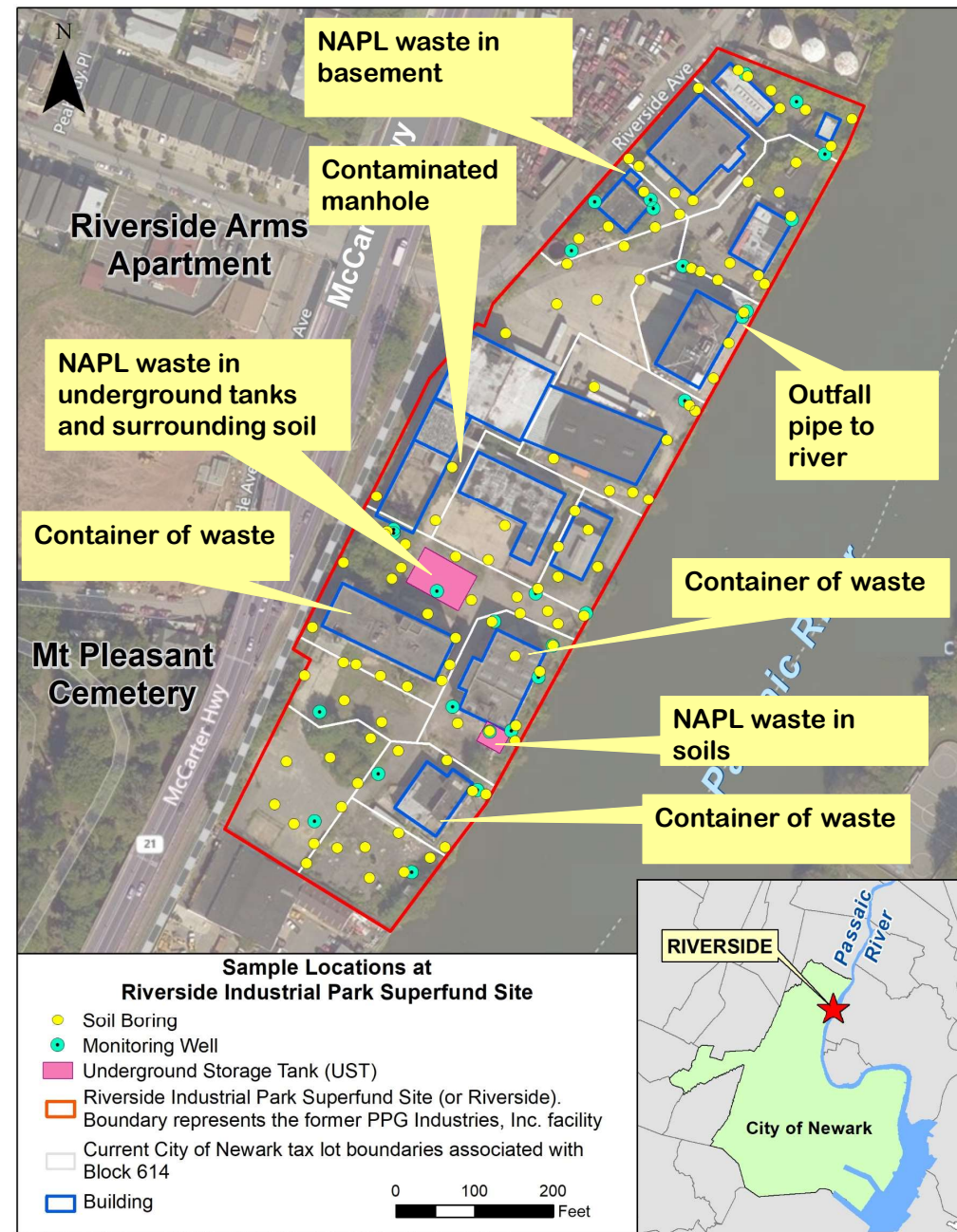
Groundwater samples

Indoor air samples

Sample waste containers and tanks

Sample contents of manholes

**Non-aqueous phase liquid or NAPL** are liquid contaminants that do not easily mix with water and remain in a separate phase in the subsurface







# The Risk Assessments Concluded:

## ☐ Human health

- For current use, soils pose unacceptable risk to outdoor workers, construction workers, trespassers, or child visitors due to lead in soils
- For future use, soils pose unacceptable risk to construction workers, utility workers, outdoor workers, indoor worker, trespassers, and child visitors due to metals and volatile organic compounds (VOCs).
- Indoor air poses a *potential* unacceptable risk to indoor workers due to VOCs (there is no unacceptable risk to currently occupied buildings).
- Groundwater poses unacceptable risk due to metals, VOCs and semi-volatile organic compounds (SVOCs). However, the groundwater is not a source of drinking water.

## ☐ Ecological

- Found unacceptable risk to terrestrial or land-based species due to exposure to contaminated soil.





## **The Remedial Investigation Study Concluded:**

- ☐ **Soils were also contaminated at levels that exceeded EPA's acceptable range and above New Jersey's acceptable levels for an industrial/commercial property.**
- ☐ **Groundwater was contaminated above New Jersey's acceptable levels.**
- ☐ **While there is no current risk to indoor workers on-site, the soil or groundwater contains contaminants that could potentially enter buildings as vapors in the future.**



# Contaminants of Concern

## Soil

**Metals**

**PCB**

**Volatile Organic Compounds**

(example: benzene)

**Semi-Volatile Organic Compounds**

(example: Benzo[a]pyrene)

## Ground water

**Metals**

**Volatile Organic Compounds**

(example: acetone)

**Semi-Volatile Organic Compounds**  
(example: Benzo[a]pyrene)

*Groundwater is currently not used as drinking water.*

## Soil Gas

**Volatile Organic Compounds**

(example: naphthalene)

*Soil gas is vapor originating from soil or groundwater that can potentially migrate into buildings.*



# EPA's Objectives for the Cleanup

- **Waste**
  - Secure or remove waste
  - Prevent an uncontrolled release
  - Minimize exposure to waste material and light non-aqueous phase liquid (LNAPL)
- **Sewer Water**
  - Prevent exposure to contaminants in sewer water
  - Minimize contaminant concentrations
  - Prevent discharge of sewer water to surface water
- **Soil Gas**
  - Minimize contaminants in soil gas that may migrate to indoor air
- **Soil/Fill**
  - Minimize contaminant concentrations
  - Minimize exposure to contaminated soil
  - Minimize off-site transport of contaminated soil
  - Minimize leaching of contaminants to groundwater and river
- **Groundwater**
  - Minimize contaminant concentrations and restore groundwater quality
  - Prevent exposure to contaminated groundwater
  - Minimize migration of contaminated groundwater
  - Minimize discharge of contaminated groundwater to surface water



# Nine Evaluation Criteria

## **Threshold Criteria**

1. Overall protection of human health and the environment
2. Compliance with ARARs (applicable or relevant and appropriate requirements)

## **Primary Balancing Criteria**

3. Long-term effectiveness and permanence
4. Reduction of toxicity, mobility or volume through treatment
5. Short-term effectiveness
6. Implementability
7. Cost

## **Modifying Criteria**

8. State acceptance
9. Community acceptance





## Waste Alternatives that EPA Considered

- ☐ No Action
- ☐ Removal and Off-Site Disposal of various containers, underground storage tanks (including content in tanks and surrounding soil), and liquid waste (LNAPL) in basement of Building 15

Alternative	Protection of Human Health and Environment	Compliance with ARAR	Reduction in Mobility, Toxicity, and Volume	Long-Term Effectiveness	Short-Term Effectiveness	Implementability	Cost
#1: No Action	No	No	Poor	Poor	Excellent	Excellent	\$0
#2: Disposal	Yes	Yes	Good	Excellent	Good	Good	\$1,580,700



## Sewer Water Alternatives that EPA Considered

- ☐ No Action
- ☐ Removal and Off-Site Disposal of deposited solids and water in inactive manhole and power-wash connecting inactive sewer line

Alternative	Protection of Human Health and Environment	Compliance with ARAR	Reduction in Mobility, Toxicity, and Volume	Long-Term Effectiveness	Short-Term Effectiveness	Implement-ability	Cost
#1: No Action	No	No	Poor	Poor	Excellent	Excellent	\$0
#2: Disposal	Yes	Yes	Good	Excellent	Good	Good	\$24,900



## Soil Gas Alternatives that EPA Considered

### Alternative 1

- No action taken
- Required by EPA for comparison

### Alternative 2

- Deed notices to restrict use
- Air monitoring in existing occupied buildings
- Future buildings would be constructed with controls
- Continue investigation on vapor intrusion

### Alternative 3

- Same as Alternative 2, except soils within 100 feet of occupied buildings would be treated



## How do the Soil Gas Alternatives Compare?

Alternative	Protection of Human Health and Environment	Compliance with ARAR	Reduction in Mobility, Toxicity, and Volume	Long-Term Effectiveness	Short-Term Effectiveness	Implementability	Cost
#1: No Action	No	No	Poor	Poor	Excellent	Excellent	\$0
#2: Air Monitoring and Future Buildings Constructed with Controls	Yes	Yes	Poor	Good	Excellent	Excellent	\$449,800
#3: Same as Alternative #2, except treat soils within 100 feet of occupied buildings	Yes	Yes	Good	Good-Excellent	Fair-Good	Poor-Fair	\$4,050,800



## EPA's Preferred Alternative for Soil Gas – Alternative #2

MAY NEED TO REMAKE THIS MAP BECAUSE COLORS ARE TOO DARK. REMEDY IS NOT OBVIOUS

### Legend

- Soil Boring
  - Underground Storage Tanks
  - Site Boundary
  - Site Lots
  - Air Monitoring or Engineering Controls (Existing Occupied Buildings)
  - Institutional Controls and Site-Wide Engineering Controls for Future Buildings
- Shallow Groundwater Vapor Intrusion Screening Level Exceedance.
- Existing or future buildings within 100-foot radius from monitoring well will warrant further investigation for potential vapor intrusion or institutional controls. Areas are based on current data. Boundary would be delineated from the edge of the plume, per NJDEP guidance.

JOB NO.: 0013620  
DATE: June, 2020  
1 inch = 100 feet  
SHEET: OF

FIGURE 5-13

RIVERSIDE INDUSTRIAL PARK  
SUPERFUND SITE

Newark, New Jersey

Soil Gas Alternative 2 - Institutional Controls, Air Monitoring or Engineering Controls (Existing Occupied Buildings) and Site-Wide Engineering Controls (Future Buildings)

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Maxar ©CNES (2020) Distribution Airbus  
DS

Spatial Reference  
Name: NAD 1983 StatePlane New Jersey  
FIPS 2900 Feet



0 25 50 100  
Feet

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## Soil/Fill Alternatives that EPA Considered

### Alternative 1

- No action taken
- Required by EPA for comparison

### Alternative 3

- Deed notices to restrict land use
- Fencing to prevent trespassing
- Removal of LNAPL in soil
- Site-wide cap
- Repair of bulkhead

### Alternative 4

- Same as Alternative 3
- Plus removal of lead in soil around Building 7

### Alternative 5

- Same as Alternative 3
- Plus stabilization in place (using cement)



## How do the Soil/Fill Alternatives Compare?

Alternative	Protection of Human Health and Environment	Compliance with ARAR	Reduction in Mobility, Toxicity, and Volume	Long-Term Effectiveness	Short-Term Effectiveness	Implementability	Cost
#1: No Action	No	No	Poor	Poor	Excellent	Excellent	\$0
#3: Deed notice, Fencing, LNAPL removal, Capping, and Bulkhead Repairs	Yes	Yes	Fair	Good	Good	Good	\$10,450,900
#4: Same as #3 plus Removal of Soils near Building 7	Yes	Yes	Good	Good-Excellent	Good	Good	\$12,633,300
#5: Same as #3 plus Stabilization in Place	Yes	Yes	Fair-Good	Good-Excellent	Fair	Poor-Fair	\$13,971,400



# EPA's Preferred Alternative for Soil/Fill – Alternative #4



MAY NEED TO REMAKE THIS MAP BECAUSE COLORS ARE TOO DARK

## Legend

- Soil Boring
- Footprint of Engineering Controls (Bulkhead)
- Underground Storage Tanks
- Site Boundary
- Site Lots
- Institutional Controls
- Excavation and Off-Site Disposal - UST and Soil/Fill NAPL
- Footprint of Soil Alternative 4 for Focused Lead Removal
- Engineering Control (Cap)

Note: Building demolition is not required or incorporated in this alternative

JOB NO.: 0013620  
DATE: June, 2020  
1 inch = 100 feet  
SHEET: OF

FIGURE 5-3

RIVERSIDE INDUSTRIAL PARK  
SUPERFUND SITE

Newark, New Jersey

Soil Alternative 4 - Institutional Controls, Engineering Controls,  
Focused Removal with Off-Site Disposal of Lead and NAPL  
Removal

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DS

Spatial Reference  
Name: NAD 1983 StatePlane New Jersey  
FIPS 2900 Feet



0 25 50 100  
Feet

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## Groundwater Alternatives that EPA Considered

### Alternative 1

- No action taken
- Required by EPA for comparison

### Alternative 2

- Deed notices to restrict use
- River wall to prevent migration
- Pump groundwater and treat for disposal

### Alternative 3

- Deed notices to restrict use
- Injections to treat groundwater

### Alternative 4

- Deed notices to restrict use
- Pump groundwater and treat for disposal
- Periodic injections to treat groundwater as needed



## How do the Groundwater Alternatives Compare?

Alternative	Protection of Human Health and Environment	Compliance with ARAR	Reduction in Mobility, Toxicity, and Volume	Long-Term Effectiveness	Short-Term Effectiveness	Implement-ability	Cost
#1: No Action	No	No	Poor	Poor	Excellent	Excellent	\$0
#2: River wall and Pump & Treat	Yes	Yes	Good	Good	Good	Good	\$34,258,600
#3: Injections to treat groundwater	Yes	Yes	Fair	Fair-Good	Fair	Good	\$20,844,800
#4: Pump & Treat with periodic injections	Yes	Yes	Good	Good-Excellent	Good	Good-Excellent	\$24,234,400

Need to include a better groundwater map for public



## Summary of EPA's Preferred Alternative

- ❑ **Waste Alternative 2:** includes removal and disposal of underground storage tanks, LNAPL, and containerized waste
- ❑ **Sewer Water Alternative 2:** includes cleaning out and closing inactive manhole and associated inactive sewer line
- ❑ **Soil Gas Alternative 2:** includes air monitoring in occupied buildings and requires future buildings to be constructed with controls
- ❑ **Soil/Fill Alternative 4:** includes excavation of lead-contaminated soils around Building #7 with off-site disposal along with a site-wide cap and bulkhead repairs
- ❑ **Groundwater Alternative 4:** includes site-wide pumping system to extract and treat groundwater for disposal with periodic injections



## Summary of EPA's Preferred Alternative

Type	Estimated Cost	Construction Time
Waste Alternative 2	\$1,580,700	1-2 months
Sewer Water Alternative 2	\$24,900	1 month
Soil Gas Alternative 2	\$449,800	1-2 months (plus continuous monitoring)
Soil/Fill Alternative 4	\$12,633,300	8-12 months
Groundwater Alternative 4	\$24,234,400	8-10 months (plus operation and maintenance)

**Total for remedy \$38,923,100**





# Agenda

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Closing Comments . . . . . Shereen Kandil



# Questions and Comments

Please keep your lines muted

Chat box —————> Phone lines

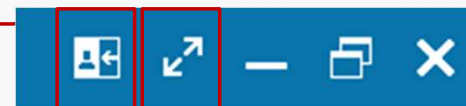
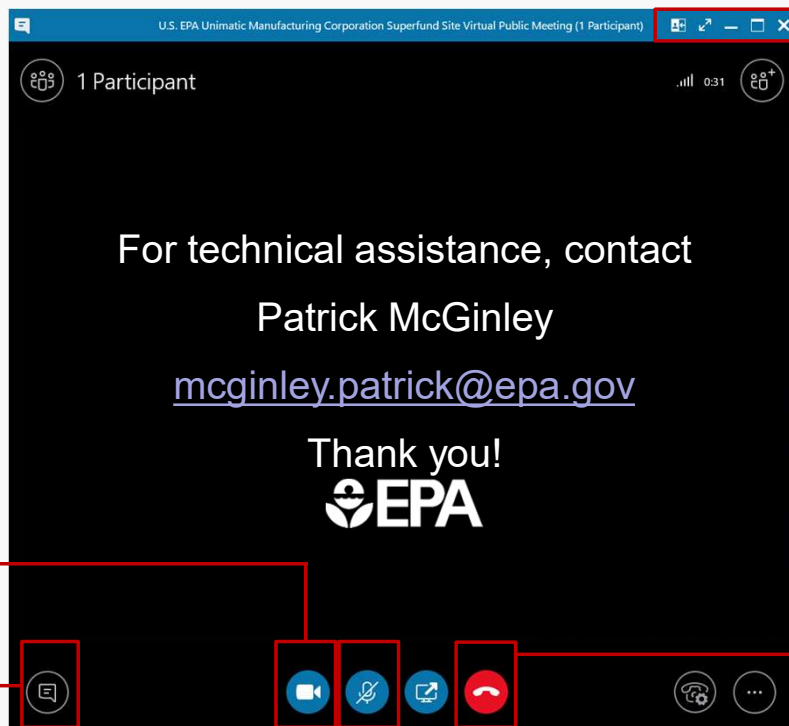
- To unmute phone use (\*6)
- To unmute computer mic please follow the skype control shown on next slide

Categorically (elected officials, residents, businesses, general public) and in alphabetical order (A-G, H-N, O-T, U-Z). *For example: residents with last names A-G*

Before your question/comments, please state your name and affiliation followed by your question or comment. *For example: "Jane Doe, resident: Where is the Riverside site located?"*



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**Closing Comments . . . . . Shereen Kandil**



**Public comment period on Proposed Plan ends August 21, 2020**

**Josh Smeraldi**  
**Remedial Project Manager**  
**290 Broadway**  
**New York, NY 10007**  
**Phone: 212-637-4302**  
**Email: [smeraldi.josh@epa.gov](mailto:smeraldi.josh@epa.gov)**

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All information related to the Riverside Industrial Park Superfund site can be found electronically at:

[www.epa.gov/superfund/riverside-industrial](http://www.epa.gov/superfund/riverside-industrial)

or by contacting Shereen Kandil

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US Environmental Protection Agency

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**Thank you!**